

AMENDMENTS TO THE CLAIMS

1-12. (Cancelled)

13. **(Currently amended)** A nonlinear optical crystal for generating ultraviolet light, said nonlinear optical crystal comprising a compound represented by the formula: $K_2Al_2B_2O_7$.

14. **(Currently amended)** A method of making a nonlinear optical crystal for generating ultraviolet light, said nonlinear optical crystal comprising a compound represented by the formula $K_2Al_2B_2O_7$, said method comprising growing a nonlinear optical crystal comprising a compound represented by the formula $K_2Al_2B_2O_7$ via solution growth with a flux that is at least one material selected from the group consisting of lead oxide, sodium fluoride, cesium fluoride, lead fluoride or potassium chloride.

15. (Cancelled)

16. **(Currently amended)** A method of converting a wavelength for generating ultraviolet light, said method comprising:

growing a nonlinear optical crystal comprising a compound represented by the formula $K_2Al_2B_2O_7$ via solution growth with a flux, and

illuminating, with laser light, a nonlinear optical crystal comprising a compound represented by the formula $K_2Al_2B_2O_7$.

17. **(Previously presented)** A method of converting a wavelength according to claim 16, wherein said growing comprises growing by solution growth with a flux that is at least one material selected from the group consisting of lead oxide, sodium fluoride, cesium fluoride, lead fluoride or potassium chloride.

18. **(Currently amended)** A wavelength conversion element for generating ultraviolet light, said wavelength conversion element comprising:

a nonlinear optical crystal comprising a compound represented by the formula $K_2Al_2B_2O_7$,
wherein said nonlinear optical crystal has an input surface capable of receiving input laser light having a fundamental wavelength, and

wherein said nonlinear optical crystal has an output surface capable of transmitting an output laser light having a second harmonic.

19. **(Previously presented)** A wavelength conversion element according to claim 18 wherein said nonlinear optical crystal comprises a crystal grown via solution growth with a flux.

20. **(Previously presented)** A wavelength conversion element according to claim 19, wherein said growing comprises growing by solution growth with a flux that is at least one material selected from the group consisting of lead oxide, sodium fluoride, cesium fluoride, lead fluoride or potassium chloride.

21. **(Currently amended)** A wavelength conversion apparatus for generating ultraviolet light, said wavelength conversion apparatus comprising:

a wavelength conversion element comprising a nonlinear optical crystal comprising a compound represented by the formula $K_2Al_2B_2O_7$,

wherein said nonlinear optical crystal has an input surface capable of receiving input laser light having a fundamental wavelength, and

wherein said nonlinear optical crystal has an output surface capable of transmitting an output laser light having a second harmonic.

22. **(Previously presented)** A wavelength conversion apparatus according to claim 21, wherein said nonlinear optical crystal comprises a crystal grown via solution growth with a flux.

23. **(Previously presented)** A wavelength conversion apparatus according to claim 22, wherein said growing comprises growing by solution growth with a flux that is at least one material selected from the group consisting of lead oxide, sodium fluoride, cesium fluoride, lead fluoride or potassium chloride.

24. **(Currently amended)** A wavelength conversion method for generating ultraviolet light, said wavelength conversion method comprising: illuminating, with laser light, a nonlinear optical crystal comprising a compound represented by the formula $K_2Al_2B_2O_7$.